

FOLIO NEW TRAIL



The Faculty of Rehabilitation Medicine is profiled in this issue from page 2 to 5. Although only a small Faculty, the work of its three Departments of Occupational Therapy, Physical Therapy, and Speech Pathology and Audiology touches on all our lives and is recognized across Canada and internationally.



Nursing research data and the computer. The most powerful laser in Canada. States and traits of personality. Engineering and the Aortic Arch. Light emitting bacteria. People at the University are heavily involved in each of these topics and are leading the world in their investigations. Read more about them on pages 8 to 11.



Athletics and sports at The University of Alberta are featured on pages 12 to 14. Once again, in every area of competition, the Pandas and the Golden Bears have excelled themselves. Past team members will find the report quite informative. Alumni can also find out the latest about their former colleagues on pages 15 to 18.



The University of Alberta Devonian Botanic Garden boasts a Herb Garden and an Alpine Garden among its rich collection of flora. It is quite accessible to the public; so, if you want to see a Himalayan Blue Poppy or *Atropa Belladonna*, that's the place to go. Pages 6 and 7.

Faculty Profile: Rehabilitation Medicine

Overview

Physical Therapy is that branch of rehabilitation medicine which specializes in helping to restore optimal function to persons with injuries or disease. Practitioners employ sophisticated techniques in the use of exercise, heat, hydrotherapy, and massage to restore bodily functions. Joint movements, muscular strength, control, and coordination are the chief concerns in treating the patient. In recent times, however, practitioners of physical therapy have expanded their areas of concern, studying, for example, lung and heart problems, physical stress, athletic injuries, and the preventative aspects of patient care. Physical therapy is primarily interested in the physical aspects of the patient, but not to the exclusion of other concerns.

Development of the client's ability to function in the home and work place, and to gain independence, is the central concept of *Occupational Therapy*. Having assessed the abilities and



aptitudes of the client, the focus of occupational therapy is on training individuals to use their abilities to their fullest. Through the activities of daily-living, at home and at work, the client's mobility, strength, coordination and inter-personal skills are developed. Depending on the nature of the disability, occupational therapy strives to assimilate disabled persons back into the work force and thus return them to independence.

Occupational therapy and physical therapy have an inherent area of overlap: a client's physical ability has a direct influence on what that person is capable of doing. Generally, physical therapy begins the client's treatment by developing movement, coordination, and strength to the maximum. Occupational therapy then complements the physical therapy by helping the client apply his new found or newly regained movement or strength

to the functions of daily-living or work. Occupational therapy develops a balance between the client's physical and psychological needs by concentrating on the functional use of the body.

The Department of *Speech Pathology and Audiology* within the Faculty of Rehabilitation Medicine is primarily involved in the areas of speech, language, and hearing disorders. Speech pathology is defined as the assessment and treatment of speech disabilities. Common disabilities include articulation, voice, stuttering, and language problems. Audiology involves the measurement of hearing loss and the rehabilitation of those with hearing deficits.

Historically, occupational therapy developed from the philosophy that activity is critical to man's development and health. The use of activities, now often referred to as arts and crafts, to develop motor skills and improve

psychological functioning was undertaken in Canada in the early 1900s by the first graduates from the University of Toronto.

Misconceptions arise from the assumption that arts and crafts are engaged in for purely diversional purposes. The use of activity remains central to occupational therapy; however, the focus of such activity has broadened to include such areas as energy conservation in home management and daily-living tasks, and gross and fine motor tasks designed specifically for their type of sensory input.

Misunderstandings, in all three areas of rehabilitation medicine, are to a great extent the result of lack of familiarity with the disciplines and what they can now offer as a result of their greatly expanded body of knowledge and clinical practice.

In speech pathology and audiology, most people who have some familiarity with the discipline are

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Office of Community Relations
423 Athabasca Hall
The University of Alberta

Telephone: (403) 432-2325
Director: W.A. Preshing
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aware of what speech pathology can do in the treatment of the more common speech and language difficulties. Few are familiar, however, with work being done in the treatment of people suffering from language loss resulting from strokes.

Considerable progress in the form of new techniques and methods of treatment has occurred in the recent history of rehabilitation medicine. Because there is a sharing of knowledge between disciplines, developments and discoveries in chemistry, biomechanics, physics, and psychology have allowed new medical techniques to be developed. Rehabilitation medicine has explored and researched areas that until recently were not thought to be of great significance in the treatment of disabilities. One such area is the application of knowledge from the discipline of linguistics to speech pathology and audiology. With new technology and research, rehabilitation medicine has, in recent years, greatly broadened its scope of interest. Injuries or diseases that were once thought to be outside the realm of rehabilitation medicine are now treated along with the more traditional illnesses.

In the case of physical therapy (as stated earlier), nerves, bones, and joints were at one time the sole concern. Today, treatment of heart and lung problems caused by disease or injury is common. In addition, the prevention of stresses and strains that may lead to injury has become a very major concern.

Message from the Dean

Three distinct professional programs, Physical Therapy, Occupational Therapy, and Speech Pathology and Audiology make up the Faculty of Rehabilitation Medicine. However, there is a strong common bond. All three disciplines have as their primary goal, the education of professionals to assist the emotionally, developmentally, and physically handicapped populations to use their abilities to their fullest in their daily lives. Common goals are found in a concern for public education; to facilitate integration of the handicapped into the mainstream of society; and in research pursuits to further the development of effective treatment

procedures and methods of service in rehabilitation.

Within the structure of modern health care and educational services, greater emphasis is being placed on prevention and on decentralization of services, from the traditional large medical institutions to the community resources. The collective skills of Physical and Occupational Therapists together with Speech Pathologists and Audiologists provide much of the framework for the provision of such modern services.

These three disciplines together provide services in the areas of physical restoration, retraining and development; psycho-social rehabilitation; correction and facilitation of communication skills; prevocational evaluation and assistive techniques in activities of daily-living; and training in adaptive techniques for sports and recreation. Curriculum content includes basic sciences such as anatomy and physiology; social sciences, including psychology and sociology; clinical sciences, including the study of diseases, traumatic injuries and psychiatric disorders; and the skills and techniques specific to each of the three individual professions.

The basic tenet of rehabilitation is to restore the client or patient, as far as possible, to his former level of ability, or to as high a level as is compatible with any residual physical or psycho-social disability. In the area of developmental disability the term "habilitation" might be more fitting, as here the task is to develop basic skills rather than restore lost ones.

Integration of the client or patient into the community rather than institutionalizing him has always been fundamental to the concept of rehabilitation. Rehabilitation medicine academics and clinicians alike are encouraged by the recent changes in focus of health care and educational services in Alberta. The govern-

ment's increased interest in promoting home care and other community services, as well as the recent developments in regard to educational programs for the handicapped, will greatly facilitate the goals of rehabilitation in the future. There are many excellent rehabilitation units within acute care medical facilities in Alberta, but only recently have these personnel been provided with funds and facilities to allow them to move into the community with services for the patient following discharge from the active hospital.

The Faculty of Rehabilitation Medicine began as a response to community need for Physical Therapists in the 1950s. Now the Faculty is again responding to community need by developing programs in which rehabilitation professionals will acquire the skills necessary to provide services within the changing concepts of health delivery services in Alberta and elsewhere. Provision of services to communities, especially rural communities, requires higher levels of self-confidence, administrative skills and professional autonomy in young professionals. Unlike the hospital team where professionals work in close association with each other, the community teams must learn new ways of integrating their services; make greater use of supportive services; and develop greater self-evaluative skills necessary for maintaining professional standards.

It is the belief of the Faculty of Rehabilitation Medicine that the changes over the years from diploma programs, to baccalaureate degrees, to the current developments for graduate programs, and the associated refining of curricula, have provided a firm foundation for the graduation of competent professionals in the three disciplines; graduates ready to take on the challenges of health care, and educational developments in the 1980s.

Benita Fifield, Acting Dean

Historical Background

Discussion of the possibility of establishing a program in physiotherapy dates back to 1945.* The importance of this branch of medicine was first recognized here, largely as a result of injuries sustained in World War II, and exposure to the advanced rehabilitation facilities in England. At that time a two-year certificate program was proposed but never materialized. It was not until a severe polio epidemic in 1952 and 1953 that the importance of rehabilitation was reconsidered. Because of the severity of the epidemic, it was decided that a training program should be established as quickly as possible. In 1954, eighteen students enrolled in a two-year diploma program in physical therapy. Programs in occupational therapy, and speech pathology and audiology were introduced later, in 1960 and 1969 respectively.

Courses were expanded to three years of study in 1960 and the name of the school became the School of Rehabilitation Medicine in 1964. The new name was intended to reflect the changing roles and functions of the school. The first degree offered by the school was Bachelor of Physical Therapy in 1969. Rehabilitation Medicine was granted Faculty status in March 1976.

Within the Department of Speech Pathology and Audiology the majority of staff members come from, or were educated in the United States. The Departments of Physical Therapy and Occupational Therapy, in the 1960s were staffed primarily by persons from Britain. At that time, highly trained professionals were not to be found in Canada and, consequently, personnel were hired from other countries. Currently the faculty of these departments includes several Canadians as well as individuals from Britain, Japan, Australia, India and the United States.

In the course of its history, the Faculty of Rehabilitation Medicine has been primarily a teaching Faculty, although considerable research has been undertaken.

Current goals include the establishment of programs beyond the baccalaureate level in all departments. The Faculty believes that Canada is falling behind other countries in the provision of education in this field, particularly in physical and occupational therapy. At present, there are two Canadian universities offering master's programs in Rehabilitation, with emphasis on teaching and administration. Neither of these programs offers the degree in the specific professional disciplines of physical or occupational therapy, as this Faculty wishes to develop. The Faculty believes that education beyond the baccalaureate level must be provided to fill the future research and teaching requirements of Canadian health education programs. Several Canadian universities offer master's level degrees in speech pathology and audiology.

Currently, there is no legislation in Alberta that provides licensure for physical therapists, occupational therapists, speech pathologists and audiologists. Negotiations have been in process for some time between the professional organizations and the government of Alberta in an attempt to obtain professional legislation for occupational therapists and speech pathologists (physical therapists have this legislation) and licensing for all three disciplines.

It is hoped that professional acts for these three disciplines would provide greater opportunity for independent professional practice, particularly with reference to the ability to treat some clients without the necessity of a medical referral.

Access to services should be available to the public outside the medical model. Individuals with developmental disabilities, lifestyle concerns and needs for social services are not "sick," but do require access to services. Current trends in Alberta towards home care, community services, more comprehensive services for the elderly and rural based rehabilitation personnel make the traditional medical model inappropriate. Rehabilitation professionals must be integral members of the service team along with social



workers, nurses, physicians, psychologists and others.

** This information is taken from Senate minutes of 1945 meetings, which are held in The University of Alberta Archives.*

Study Programs

All three departments in the Faculty of Rehabilitation Medicine restrict entry into programs by means of a quota system. Quotas are made necessary because of the limiting factors of money, space, equipment, and by the availability of clinical facilities in Edmonton for clinical practice.

To qualify for entry into programs in the Departments of Occupational Therapy and Speech Pathology and Audiology students are required to complete a pre-professional year. The pre-professional year can be taken in the Faculty of the student's choice, but for both departments specific first-year introductory courses are required. Although the pre-professional year serves as the first year of a four-year study program, entry into subsequent years of the program is determined by academic standing in the pre-professional year. A personal interview is also required before admission to Occupational Therapy.

Admittance to the undergraduate program offered by the Department of Physical Therapy is determined by academic achievement in high school, performance in other programs at the Uni-

versity and the Allied Health Professions Admission Test. Applicants must make at least one visit to a hospital department of physical therapy and submit a report in reference to this visit.

Student Quotas:

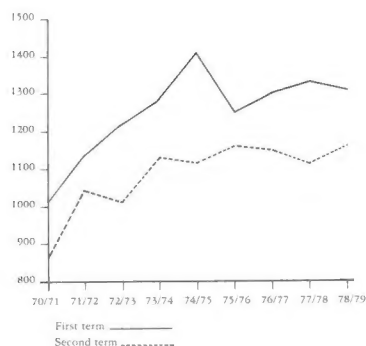
Occupational Therapy	36*
Physical Therapy	40
Speech Pathology and Audiology	25

* Beginning fall 1980

Throughout all programs of study, students are encouraged to maintain a high level of achievement. Grades in all prerequisites must be satisfactory before engaging in subsequent courses. First degrees awarded upon successful completion of study programs are Bachelor of Science in Occupational Therapy, Bachelor of Science in Physical Therapy, and Bachelor of Science in Speech Pathology and Audiology.

Unlike some other disciplines, first degree programs in rehabilitation medicine do not allow for a great deal of flexibility. All areas of specialization in rehabilitation medicine tend to have common roots or principles, more individualized or specialized study and research programs are generally pursued after completion of a first degree.

In 1979, The University of Alberta became the first institution in Canada to offer a graduate degree in physical therapy. The degree of Master of Science in Physical Therapy is also the first graduate degree offered by the Faculty of Rehabilitation Medicine. Entry into the program is restricted to only four students each year. The University of Alberta program goes beyond other Canadian master's programs in rehabilitation and emphasizes the training of researchers as well as instructors. Universities in western Canada have had difficulty in finding faculty with post-graduate qualifications, so it is hoped that graduates from this program may help to rectify this problem. The University of Western Ontario is currently looking into the possibility of offering a similar program.



Winter Session Number of Course Registrations—Rehabilitation Medicine
Courtesy of the Office of Institutional Research and Planning.

Baccalaureate Degrees, total to date:

Occupational Therapy	106
Physical Therapy	220
Speech Path. & Aud.	156

Winter Session 1979-80
1,535 registrants in 56 courses

Percentage of Qualified Applicants Accepted

Occupational Therapy	76
Physical Therapy	33
Speech Path. & Aud.	38

Job Prospects Upon Graduation

Job prospects in Alberta are favorable for professionals in rehabilitation medicine. Difficulties in finding jobs are more a matter of distribution or location than availability. Because more people prefer to work in or near major centres, the demand here is great and vacancies are filled quickly. Due to the competitiveness in these centres, therefore, newly graduated students may not secure the jobs they desire as quickly as they would like. In the rural districts of the province the situation is reversed. Recent trends in medical care are resulting in the establishment of clinics or health units in small towns and the recognition of rehabilitation medicine as a major part of patient care. Job vacancies in the rural districts are high and are not filled quickly.

Another area presenting a high demand for staff is home-care. At present, government programs are promoting the

establishment of home-care services as an integral part of local health units. Although the benefits and sociological effects of getting back into the home as quickly as possible have been realized for quite some time, home-care is a relatively new concept in Alberta. With the development of such community services, many new positions are becoming available across the province.

Physical and Occupational Therapists are primarily employed in medical settings such as hospitals, rehabilitation clinics and health units. However, a growing number of therapists are being employed in home-care services, private practice clinics, the school systems and in industry.

As members of the health care team, Physical and Occupational Therapists consider education of the patients in their own self-care skills to be an important aspect of the rehabilitation program.

At present there is a growing demand for people to work in the field of gerontology (dealing with old age and its diseases). Young professionals sometimes choose not to work in this area, as they perceive extended care as less challenging than acute care. However, individuals who do take positions in facilities providing long-term care to both young and elderly clients frequently find their jobs both challenging and rewarding.

In all areas of the province, staff turnover in rehabilitation is relatively high. Job opportunities are therefore available on a regular basis. This turnover is seen to be partly due to marriage of the female therapists, but more so to the increasing tendency for young professionals, male and female, to travel and to relocate, knowing that they have the opportunity to find employment in many countries.

Although Speech Pathologists and Audiologists may also work in medical settings, much speech pathology and audiology work involves teaching within the school systems and special education organizations.

Research

Research in rehabilitation medicine in general has undergone considerable change within the past five to ten years. There has been a marked shift from research directed and interpreted by medical doctors and assisted by therapists, to research undertaken and interpreted by therapists themselves. Similarly with research publications, therapists are conducting their own research and publishing the results in their own right. Rehabilitation medicine needs qualified researchers. To this end The University of Alberta's new physical therapy master's program emphasizes research rather than clinical skills. The Faculty is making a strong push for the establishment of master's programs in its other two departments.

The Faculty of Rehabilitation Medicine is becoming widely known for its research, and has among its staff a number of people internationally recognized within the discipline.

Research in the Department of Physical Therapy covers a wide range of topics such as the study of stresses and strains that may eventually lead to back problems. The purpose of another study is to evaluate gait or styles of walking, and how faults in gait can affect body mechanics. One study presently being undertaken concerns pregnancy and its effect on gait. Changes in the attitudes of students toward disability and injury is the subject of another project, requiring the involved students to spend weekends in wheel chairs or using crutches, or having an arm immobilized in a splint. It is thought that the experience will give the therapists empathy with the disabled. Other areas of research are the development of the vertebral column; muscle action and nerve response; and the effects of weight distribution and posture. Sports medicine and injury in athletics are becoming increasingly important as a result of the growth of interest on the part of the public.

The Department of Occupational Therapy has programs of research that reflect the balance which the discipline maintains, between psychological and physical factors. Examples here are topics such as the psychosocial aspects of disability, neurophysiological rehabilitation, and forensic psychiatry. The ability of the handicapped to learn is an area of increasing concern in our society. In this regard, research into the vocational and pre-vocational abilities of the mentally handicapped, and the learning problems children have as a result of visual and perceptual difficulties, will answer many questions. Sexuality of the handicapped is a relatively new interest area. Until quite recently this subject was not considered as a rehabilitation concern and was not freely discussed due to the values of a more modest society. The attitudes of the public to various injuries and disabilities, and preventative care are other important areas of research in the Department of Occupational Therapy.

In Speech Pathology and Audiology, the best procedures for the treatment of stuttering children and the maintenance of fluency in stutterers who have received clinical help are being explored. The Department has been extremely successful with its work related to stutterers. Another widely recognized project is the study of voice problems in people of all age groups. The use of fibre optic photography has been particularly useful here. The communications problems which increase with old age are being studied from several different points of view. One aspect is the change in speech and hearing abilities which are common to many elderly people. Another study related to the speech and hearing problems of old age is the development of successful methods of treatment. Additional areas of research are the aspects of language learning in pre-school children, and the speech problems of the mentally retarded. □

Twenty-one Years at the Devonian Botanic Garden

The University of Alberta Devonian Botanic Garden was founded in 1959 on 80 acres of land donated by the late H.A. Dyde, Q.C. and University of Alberta alumnus. At that time, the Garden consisted of sand dunes, peat sloughs, two oil wells, and exposed pipelines.

The early years were spent (with minimal budget) in clearing plots, digging drainage ditches, erecting a lecture hut and two small garages, and burying the exposed pipes. Progress was slow until 1974, when a wet fall, followed by heavy snow, led to flooding in the spring of 1975. Thousands of plants were killed in that flood. We kept hoping that the water would go down, but it didn't for one entire year; one of the reasons being that the Garden is in an area of aeolian sand dunes with an intermittent drainage pattern, and there is nowhere for the water to go.

In 1975, the fund-raising group, the Friends of the Devonian Botanic Garden started to repair the flood damage. Their efforts culminated in a large grant from the Devonian Foundation of \$572,405. This sum was matched by the Department of Advanced Education, and enabled the Garden to do three things: 1) to acquire a further 110 acres of land; 2) to reconstruct the flood damaged areas of the Garden; and 3) to erect the Headquarters Building and greenhouses.

The reconstruction period was a fascinating one. A dragline was brought in and the Calla Pond was greatly enlarged and deepened to twenty feet, and the land built up around it. The area east of the Calla Pond was landscaped with a collection of shrubs and trees of known hardiness in the Edmonton region. This area is very interesting to the public. The west side of the Calla Pond now has a large collection of plants of the Province of Alberta. This is the only such labelled collection in the province, and is a teaching area of immense value for students of all ages, and for the general



public.

A site was raised for the herb garden and later landscaped with a grant of \$5,000 from the Clifford E. Lee Foundation. This herb garden is an informally designed garden with long beds which flow in the same basic patterns as the sand dunes, and which have been edged with dwarf caraganas. The paths have been laid out with inter-locking bricks which gives a firm surface for wheelchairs, etc. In the many beds there are collections of various types of herbs: 1) *culinary*, such as parsley, sage, thyme, marjoram; 2) *medicinal*, such as rhubarb, *Atropa belladonna*, raspberries, and scurvy grass; 3) *poisonous*, such as hemlock, *Datura*, and nightshade; 4) *economic*, such as flax, artichokes and lentiles; 5)

dye, such as woad and madder; 6) *oil*, such as rapeseed, mustard and sunflower. This garden is of great interest to cooks, weavers, and students of all ages.

The old east pond was deepened to twenty feet in places and the soil spread on the surrounding plots which had been flooded. A channel was dug, connecting this pond with the Iris Dell. In the middle was left a raised area like a sand dune, and on this we have placed the garden of plants used by the native peoples of Alberta. This garden was initially funded by a grant from Imperial Oil Ltd. Construction was delayed due to the flood, and this garden will finally be opened to the public by the fall of 1980.

The old *Primula Dell* also suffered in the floods, and we had

to raise this whole area up by three feet. This done, the area was landscaped, and the old *Primula Dell* pond deepened and re-landscaped. The borders, which are full of plants from the Himalayas, such as *Primulas*, *Cowslips*, and the emblem of the Garden—the Himalayan Blue Poppy—have been replanted. They do well in this area, as it has a deep and long-lasting snowcover in winter. The lawn has been replanted, giving a beautiful vista of trees, shrubs, and blue poppies.

One of the dreams of the late Dr. James Whyte, who retired as Director in 1971, had been to have an alpine garden, modelled on that of the Royal Botanic Garden in Edinburgh. Before he died, a grant was received from the Stanley Smith Trust in Scotland to begin construction of such a garden. The alpine garden is now situated on an area of the sand dunes west of the oil well. When it was under construction it was decided to keep the original shape of the sand dunes and build the garden around it in a bowl-shaped area. This large part of the Botanic Garden is a teaching area which displays different styles of alpine gardens. There are four main areas here: 1) simulated glaciated ridge—similar to that found in the foothills, it seems to be the best type of alpine garden to fit into the prairie landscape; 2) a traditional type of rock garden—this has large rocks in it and is planted with the alpinines native to the Rockies of Alberta (this is an area of great interest in the spring); 3) boulder rock garden—this simulated boulder field, as found in the high Rockies, provides shelter for those plants liking some shade from the hot sun (some New Zealand plants are also grown in this area); 4) scree—this is a gently sloping area which houses cushion type plants from high altitudes. The soil for the alpinines in this garden has been made up of 50 percent sand and 50 percent acid peat. Traditionally, alpine plants require good sharp drainage and this is readily avail-

able to them on the sand dunes. Peat gives good moisture retention, and the sand, good drainage. All areas of the alpine garden have been given a mulch of sharp stone chips to protect the plants from excessive soil water evaporation, and also to stop the sand from blowing. Lawn has been planted in the centre of the alpine garden. This part of the Botanic Garden is at its best in May and early June, with its hundreds of alpine plants giving great displays of color.

In various parts of the Garden are shrub borders which also have other plants known to be hardy in the Edmonton region, including a good collection of shrub roses, dogwoods, birch, and poplar. As well, these plants of known hardiness are inter-planted with experimental plantings of new, not-as-yet-known shrubs in this region.

We have constructed a nature trail which goes through the woodland and crosses the wet-lying areas by means of boardwalks. This trail is used widely by nature lovers and school children. There are also two ecological areas in the Garden, one a forest ecological reserve and the other a wetland ecological reserve. These are used as part of a research program.

One of the prime objectives of the Botanic Garden is to conduct winter hardiness trials to increase the range of trees, shrubs, herbaceous plants, and bulbs which will grow in the Edmonton region. One of the things we are always asked is "where does this material come from?" Most of the plant material comes from seed, which we obtain through seed exchange with over 500 international botanic gardens. All these plants have to have their names checked, and we now have an herbarium of cultivated plants of over 1,800 specimens.

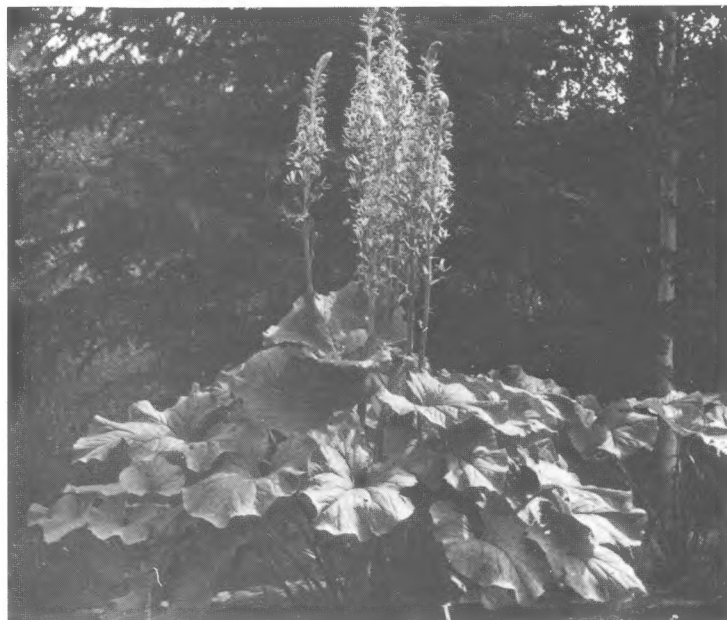
Phase I of the Headquarters Building is now in use and operation. This building contains a large seminar room, office space, a workshop for the Botanic

Garden Club (the group that does all the arranging of the dried flowers), a large potting shed, and two large greenhouses. One of these greenhouses is a service greenhouse where plants are grown for planting out; the other is an indoor rock garden which has been landscaped and will eventually be open to the public. This greenhouse was funded by a matching grant of \$110,000 from the Muttart Foundation.

This is what has happened in the past twenty-one years. But what of our future? In 1978, Butler-Krebes Associates Ltd. prepared a long-range development plan report. Proposals in this report provide a framework for the logical development of the Garden in accordance with its aims and objectives. The Friends of the Botanic Garden are committed to carrying out these objectives. Phase I of the Headquarters Building has been built; Phase II (which is yet to be funded) will include an herbarium, library, research space, a lecture hall for extension work, an education area which would be adjacent to the main area of the shop, and which will be an area of educational horticultural and botanical exhibits staged on a semi-permanent basis. This will provide an excellent opportunity for public education. A handicapped garden is planned adjacent to the building, for easy access from the parking lot.

A large Japanese Garden will be built in the area immediately south of the Headquarters Building. This will be a garden where the principles of Japanese landscape architecture will be applied, using native Alberta plants.

The southern part of our new land will be eventually developed into an arboretum, with service plots adjacent. Between the arboretum and the Japanese Garden will be various small educational type gardens. Among these will be included a garden of plants which were introduced by settlers from eastern Europe, a



collection of fruit trees, a home demonstration garden (which will show people various styles and plans for their home gardens), a lawn trial garden, a moss garden, and finally, a trial garden for annuals where different annuals can be tried out each year.

1984 will be the 25th anniversary of the founding of the Garden. At that time, the American Association of Botanic Gardens and Arboreta will be holding its annual meeting in Edmonton, and we hope that at that point we will have achieved many of our objectives as outlined above. A final note—the objec-

tives of the Garden could not have been met without the invaluable support and help of the Friends of the Botanic Garden.

The Devonian Botanic Garden is open to the public from 1-6 p.m. daily, May through September. For the first time, this year, guided tours will be available, in July and August, Wednesday through Sunday, at 1:30 p.m. and 3:30 p.m. This is done with the help and support of Community Relations. □

This article was contributed by P.N.D. Seymour, Director of the Devonian Botanic Garden.

West Jasper Place Homecoming '80

A school which has contributed much to the life of the city of Edmonton is to hold its 1980 Homecoming from 1 to 3 August, and, through the pages of *Folio/New Trail*, the organizers wish to invite West Jasper Place alumni to join in the celebrations. Jean Mucha, who was a member of the 1947 graduating class and gained her BEd in 1965 from The University of Alberta, is Chairman for the WJP Homecoming '80.

According to Mrs. Mucha (née Cunningham), a special invitation is extended by the Homecoming committee to staff and students of West Jasper Place who were associated with the school before amalgamation with Edmonton in 1963.

The committee has set up an interesting program for the event. Beginning Friday night, 1 August, there will be a "meet the teachers" reception in the Canora Community Resource Centre at 15450 105 Avenue from 8 p.m. to 10 p.m. The following day, from 12 noon to 4 p.m. at the Sherwood School (9550 152 Street), alumni will be able to tour an exhibition of memorabilia related to WJP and, in the evening, a reception, banquet, and dance will take place at Lister Hall on the University campus. Prior to this reception, there will be an opportunity to take tea with former classmates and teachers, from 2 p.m. to 4 p.m. at the Sherwood School.

Although the locations of these events may not seem too appropriate to alumni of the school, it should be noted that the original school site is now the Jasper Place Campus of the Grant McEwan Community College and that construction and demolition are taking place concurrently there. The Canora and Sherwood locations, being the second and third schools built in West Jasper Place, have been very generously offered rent free to the Homecoming committee by the Edmonton Public School Board.

On Sunday, 3 August, the celebrations will continue. First, at 10:30 a.m., there will be an "ecumenical church service" at the Canora centre, then from 12 noon

a family picnic at Laurier Park (134 Street and Buena Vista Road). Finally, from 3 p.m. to 5 p.m., coffee may be taken and farewells said at the Canora centre. Monday, 4 August, will be Heritage Day in Edmonton, so it is quite possible that festivities may even continue beyond the end of the formal program.

For all these activities, and to help defray the related expenses, there will be a nominal registration fee of \$25. For registration, and to offer help in the proceedings, or simply for more information, WJP alumni are urged to contact M. Bruha, 14507 98 Avenue, Edmonton, Alberta T5N 0G9. □

Locating Nursing Research Data Via Computer

Since 1977, nursing researchers across Canada have been "telephoning" The University of Alberta to obtain information on nursing research in progress. Using a suitable computer terminal and a telephone coupler (modem), they are calling for information about current thesis and non-thesis research at Canadian nursing institutions.

In 1977, the Faculty of Nursing at the University implemented CORN (Canadian On-going Research in Nursing), an experimental program to make available current data about nursing research. Using information supplied by about ten cooperating institutions, the Faculty agreed to maintain a computerized data base on a trial basis. DATAPAC, the computer access system which uses special long-distance telephone lines, provided access for users outside Edmonton, and the Faculty of Library Science prepared a search-retrieval program to work with the University's Amdahl computer.

The data file contains the proposed title of the thesis or report; names of researchers,

supervisors and sponsoring institutions; date of initiation of the project; and keywords describing the project. Information may be entered and searched in either French or English. A dictionary prepared by the Canadian Nurses' Association allows those entering information to list keywords in both languages, thus information can (potentially) be searched in both languages. The file allows researchers to identify persons working in similar fields and should help prevent duplication of effort in a field with limited financial and research resources.

The data file has not eliminated the need for conventional publication of research results, but it has decreased the time required to disseminate information about research projects. Users of the CORN system can write directly to the individual researcher for information while research is in progress. Information on the file is updated quarterly, with the cooperating institutions and individuals sending additions/deletions and corrections through the regular postal system.

The computer program used by CORN is an adaptation of one

developed by Dr. C.H. Davis (formerly Dean of Library Science at the University) for the storage and retrieval of thesis information in Library Science. It includes the capability to search on a number of different terms and a system of weighted terms—features which should prove valuable as the system expands and searches become more complex.

The program is not without its faults. Data accuracy is dependent upon the researchers themselves, and how they describe their research. Since many of the researchers are not bilingual they fail to include keywords in both languages. The standard lexicon also seems to be inadequate for describing research occurring in some of the newer areas of nursing interest. This results in the use of terms which cannot be easily translated. Both data input and search processes suffer from the hazards of computer "logic" which dictates an absolute protocol of blank spaces 'primes' and format. Forget even a single blank space and the computer aborts the search with the frustrating message: "ERROR, YOU PROBABLY FORGOT . . ."

Use of the CORN system is increasing, however, and Dr. Amy Zelmer, Dean of Nursing and initiator of the service, indicates that the problems are being overcome. "CORN has given us considerable information about the needs of practitioners who use data files. The current program is oriented toward users who understand computers, hopefully we can make the necessary changes that will allow better access by individuals who don't want to understand computers."

CORN is accessible by anyone who has the use of a suitable terminal. Once the user is "signed on" to the computer system, CORN prompts the user (in both French and English) for the search parameters. Signon information and a User's Manual with more complete instructions are available from the Faculty of Nursing, The University of Alberta. □

(This article was contributed by A.C. Lynn Zelmer, International Communications Institute, P.O. Box 8268, Station F, Edmonton, Alberta T6H 4P1.)

Attention Nursing Alumni

The Board of Directors, Visual Archives, Alberta Schools of Nursing, has received a New Horizons grant from Health and Welfare Canada to assist in the collection and display of archival material related to present and former schools of nursing in this province. As a result of this grant, the Board of Directors, under the presidency of G. Purcell, is looking for historical information, memorabilia, and the like, which could be displayed in a permanent setting within the Provincial Office of the Alberta Association of Registered Nurses.

It is hoped that such material will include data on the founding and progress of Albertan nursing schools, photographs, pins, graduation certificates, and even miniature dolls decked out in uniform.

The first school of nursing in Alberta was established in 1894. To begin with, the early schools operated under the auspices of hospitals but, more recently, the

universities and colleges of this province have played an increasingly significant role in the education of members of the nursing profession. Currently, there are eleven nursing programs offered in Alberta: two university, five community college, and four hospital programs. Twelve schools have discontinued their operations since 1894. There is, therefore, an urgent need to preserve the rich historical heritage which has constituted an important part in the traditions of nursing in Alberta.

Thus, should any alumna or alumnus of nursing programs at The University of Alberta have any archival material which might be considered of interest to a wider public, please do not hesitate to contact the Secretary to the Board of Directors, Visual Archives, Alberta Schools of Nursing, Helen M. Sabin (BSc [Nu] '38), at 4712 106A Avenue, Edmonton, Alberta T6A 1J5 □

coming events

Convocation Hall

29 June to 6 July. 1980 National Finals of the Canadian Music Competitions.

Jubilee Auditorium

3 July. Charles Aznavour
16 to 27 July. Beatlemania
8 and 9 August. "Dance, Dance, Dance!"

28 to 30 August. "Alberta."

SUB Theatre

17 to 23 August. Ksan Performing Arts.

Alberta Festival of the Arts

8 to 10 August. Travelling Folk Festival and Goodtime Medicine Show. Gold Bar Park.

17 August. Bim, Bom, Boom. Clown Trio. Borden Park.

17 to 24 August. Jazz Festival. Jubilee Auditorium, Citadel Theatre, Centennial Library.

18 August. Alberta Provincial Honour Band, Choir and Orchestra. Venue to be announced.

Citadel Theatre

30 June to 4 July. "The Black Bonspiel of Wullie MacCrimmon."

5 July. "Mr. Alberta" Competitions.

14 to 26 July. "Ten nights in a Barroom." Klondike Melodrama.

7 to 20 July. National Multicultural Theatre Festival.

29 July to 3 August. "Juve" presented by Green Thumb Players.

publications

Arnold, S.H. (Comparative Literature) and J.L. Mollel (Drama): An Introduction to the Drama of Penina Muhando and the Theme of *Wapotovu na Kuwarudi* (Deviants and Rehabilitation). *Greenfield Review* 8 (1980): pp. 189-202.

Barter, R.G. (Library): Wapiti Wanderings. In *The Trophy Hunters*. Ed. C. Allison. Ultimo, New South Wales, Australia: Murray Book Distributors Pty Limited, 1979: pp. 197-209.

Blodgett, E.D. (Comparative Literature): Gardens at the World's End or Gone West in French. *Essays on Canadian Writing* 17 (1980): pp. 113-126.

Jones, J.F. (Comparative Literature): Methodology in Madness: Reflections on the Decline of the University. *Humanities in*

Society 2, No. 3 (1979): pp. 333-338.

Kosinski, L.A. (Geography) Ed.: *Newsletter*. Commission on Population Geography, International Geographical Union 7 (1980).

Krótki, K.J. (Sociology) and R. Beaujot (University of Western Ontario): *Le recensement du Maroc de 1971. Documents d'Information* 26. *Synthèse des Recensements Africains*. Paris: Groupe de Travail de Démographie Africaine.

Owram, D. (History): *Promise of Eden. The Canadian Expansionist Movement and the Idea of the West, 1856-1900*. Toronto: University of Toronto Press, 1980.

Preshing, W.A. (Community Relations): *Business Management in Canada. An Introduction*.² Toronto: Wiley Publishers of Canada Limited, 1979.

Simpson, C.J. (Community Relations): The "Conspiracy" of A.D. 39. In *Studies in Latin Literature and Roman History* 2. Ed. C. Deroux. Brussels: *Collection Latomus* 168 (1980): pp. 347-366.

Provincial Museum

Until 7 July. Photographs from the Public Affairs' Collection.

Until 6 September. "Discovering Dinosaurs."

Centennial Library

2 to 31 July. "Land Interpretations." An exhibition of works in oils and serigraphs.

5 to 30 August. Thoma Ewen. An exhibition of tapestries.

Beaver House

Until 11 July. "Southern Exposure" current developments in the visual arts in Southern Alberta.

21 July to 15 August. "From the private collection of . . ."

25 August to 19 September. "A Glimpse of the Present."

Devonian Botanic Garden

Tours. Wednesday, Thursday, Friday at 11 a.m., 1 p.m., 3 p.m. Saturday, Sunday at 1:30 p.m., 3 p.m., 4:30 p.m.

Department of Plant Science

16 July. Field Day at Parkland University Farm.

Northern Light Theatre

24 July to 29 August. "A Midsummer Night's Dream."

31 July to 30 August. "As You Like It." For show times and ticket information call 429-3110.

Research Reporter

New Laser is Most Powerful in Canada

Dr. Seguin indicates the red maple leaf emblazoned on the white background and chuckles. "You can see we're not separatists here," he says.

The University of Alberta professor is standing beside a large white steel vessel on which bold red maple leaves have been painted. The leaves are a finishing touch which combine with the vessel's size and shape to give it a striking resemblance to a space capsule.

One can almost imagine an undergraduate, dazed by too many hours spent in nearby Cameron Library—or perhaps more plausibly the Students' Union pub—stumbling into the room and thinking he had discovered a secret space program being conducted from the basement of the engineering building.

Such is not the case, but the reality is almost as interesting. The capsule is the outside shell of the highest-powered laser in Canada, the product of fifteen years of work by Dr. Herb Seguin, a Professor of electrical engineering.

The laser has been operational only since early February. So far it has been operated at only about thirty percent of its potential—and at that it is about five times as powerful as any laser elsewhere in Canada. Its closest rival is a prototype housed two floors up in the same building. That laser, which has a power rating of 1.5 kilowatts, will easily penetrate a concrete block or set asbestos smoking in a matter of seconds.

The new laser has a design power rating of 20 kilowatts. A kilowatt is 1,000 watts, ten times the power of a 100 watt light bulb. A typical home furnace is capable of about 100 kilowatts. By comparison, 20 kilowatts does not seem to be all that much, but keep in mind that all the power is focussed on a spot

the size of a pinpoint.

Both the 1.5 kw and the 20 kw lasers are carbon dioxide lasers of a type developed at the University of Alberta by Dr. Seguin and his colleagues and known as PIE, from the description "photo initiated, impulse enhanced, electrically excited."

Now that PIE 2, the 20 kw laser, is operational and equalling or exceeding its expectations in all respects, Dr. Seguin is naturally happy. He is also a bit relieved. He admits that the project was something of a gamble.

About fifteen years ago, Dr. Seguin became involved in research into high-power lasers and soon he was convinced that such lasers could have an important industrial application for materials processing. More specifically, he saw them as ideal for pipeline, particularly gas pipeline, welding. He explains the difficulties associated with conventional welding in this context: The alloy steels used in pipelines are difficult to weld and conventional welding procedure relies on the placing of filler materials between the pieces being joined. Such welding is subject to human error and weather conditions; consequently the results leave much room for improvement.

A sufficiently powerful laser can join the pipeline material "like a hot knife through butter or a hot wire through ice." The material is welded so quickly that little in the way of structural changes, such as recrystallization, takes place, and no filler material is used.

The difficulty, though, was that the high-powered lasers which had been developed at the time Dr. Seguin began his research were extremely expensive and complicated, and dangerous because they relied on an electron beam, which poses an x-ray hazard. Nor were they very reliable. Altogether, they were far from being cost-effective for

industrial applications.

Dr. Seguin set to work to overcome these problems and that work led to PIE 1 which was much simpler, more reliable, and didn't use an electron beam. It became operational in 1975.

He remembers how it was greeted. "People came and looked at the laser in operation, examined sample welds and said they were impressed. But nobody was willing to develop it further for industrial application. 'Looks great,' they would say, 'Why don't you build us a big one to look at?'"

He decided to gamble and do just that. He looked for financial support within Alberta, but none was forthcoming—due, he feels, to an immaturity in the provincial funding agencies for high technology. He says that the story was always the same; while all reports would be favorable, when his proposal would get to the top levels it would be turned down. "It seems that there was a feeling at the top that if it wasn't being done anywhere else it couldn't be a good idea."

"Limping along," he says he relied on what grants he could get from the National Research Council, and when things got particularly rocky the University administration would give what assistance they could.

But that now is behind. Soon the laser should be fully operational, and, with very few alterations, it would be suitable for placement in an industrial environment. An emphasis in the development of PIE 2 was on the building not of a laboratory model but a piece of equipment for industry. In fact, the laser could easily be mounted on a three-ton truck.

Recently Dr. Seguin received a grant from the National Science and Engineering Research Council which will allow the purchase of a computer system which will interface with the laser to allow its operation via computer. As

well, accessories are being designed to accommodate the welding of pipe up to five or six feet in diameter, either by the rotation of the pipe or by the use of mirrors which will direct the laser beam around stationary pipe.

"We feel we've got a winner," says Dr. Seguin. "One more year and we'll be there."

Then, he will be inviting industrialists to see what could be the start of a revolution in materials processing. Eventually it might even change the way in which buildings are built of steel; beams and channels could be cut and put together on the spot from sheets of steel, instead of having to be specially milled and stockpiled.

States and Traits Investigated

Personality. Some might consider it an undefinable something "you've either got or haven't," but Dr. Edgar Howarth, whose chief research interest it is, looks at it differently: as the combination of "states" and "traits"—emotional states and behavioral traits—in each individual.

A Professor of Psychology who has taught at The University of Alberta since 1960, Dr. Howarth has recently been giving attention to the development of a "mood instrument," a questionnaire by which a person's mood can accurately be determined.

While mood instruments are not in short supply, in surveying them Dr. Howarth saw considerable room for improvement. Some were too complicated, others too long, others too ambiguous, and others unsuitable for application in a Canadian setting.

As a result of his work of the past few years, Dr. Howarth has developed a five-minute questionnaire which he believes to be the best available for use with adult subjects.

His assistant, Karla Schokman-Gates, is working on an instrument for use with children. This currently involves the testing of the meaningfulness of words which might be used to indicate mood—necessary to ensure that the terms used in the instrument are understood by children, and that all children understand them to have the same meaning. This is being done with the cooperation of classes of Grade 4, 5, and 6 children in Edmonton.

The work to do with mood relates to what Dr. Howarth calls the “states” aspect of personality. He says that adults are capable of at least ten distinct moods, but children of only eight.

The psychology professor is also involved in research into the “traits” aspect of personality. A good example of such research is a study done to determine the personality characteristics of people involved in volunteer work. It showed a tendency for volunteers to be less anxious, more persistent, more trusting, and to have greater superego scores—a measure of conscientiousness—than the general population. Data for the investigation came from a study done by Susan Secord and Joyce Howarth for the Alberta government on 1,000 persons, some resident in places as distant as High River or Yellowknife. Dr. Howarth served as a computing consultant for the project.

Another of Dr. Howarth's undertakings is his current investigation of birth order characteristics, such as the personality differences between only children, first, second, third born, and so on.. He is finding differences in dominance, cooperativeness, and several other important characteristics.

Engineer Gives Attention to Blood Flow

Some years ago Dr. C.M. Rodkiewicz, now a Professor of Mechanical Engineering, decided

to put his engineering expertise to work on a project which would have widespread benefits to mankind.

Coming to Alberta, he began research which brought his extensive knowledge of the mechanics of fluid flow to bear in investigations of the circulation of blood in the human body. Specific attention was given to the aortic arch, the “traffic circle” where blood coming from the heart branches off to the various parts of the body—and the region where arteriosclerosis, the hardening of the walls of blood vessels, often occurs, leading to a heart attack or stroke.

Initially Dr. Rodkiewicz was interested in determining if a correlation existed between the fluid flow dynamics of the arch and the typical development of arteriosclerosis. Using an open channel model of the arch he found a connection: The areas where pools of stagnation occurred during fluid flow in the model corresponded to the areas where arteriosclerosis first appears.

Using this work as a background, Dr. Rodkiewicz began work towards a new goal: a computer program which would predict the decrease in blood flow to the brain corresponding to differing degrees of blockage in the aortic arch. This information is of very practical concern when a surgeon is contemplating surgery and arteriosclerosis is a factor; the surgery itself often necessitates further blockage of blood flow, and it may be that a bypass is called for. It was Dr. Rodkiewicz's desire to provide an empirical basis for this decision.

After a good deal of experimentation and trial and error, the technicians associated with the mechanical engineering department were able to manufacture a three-dimensional, rigid plastic duplication of the aortic arch to meet Dr. Rodkiewicz's specifications. He is quick to praise the ingenuity and the ability of the technicians and to acknowledge their sizeable contribution to his research.

In May 1979, a paper published

in the *ASME Journal of Biomechanical Engineering* was the culmination of this stage of the research. It reported how the plastic model had been used to measure flow rates for various blockages and these results then used to design an analogous electrical model. Then a mathematical model had been developed and that had yielded a computer program. Using the program and an x-ray of the aortic arch area, a surgeon could determine the approximate blood flow to the brain.

Now Dr. Rodkiewicz has begun a further stage of this work, one in which he hopes to simulate even closer the actual conditions in the body to allow an even more exact determination of blood flow to the brain. To make this possible, a flexible model of the arch and the arterial branches leading to the areas of the arms, abdomen, and head is being constructed, and experimentation is to involve variations in the rate, frequency, and amplitude of flow.

Cold Light Investigated

Ten years ago, quite by accident, Dr. Karl Kopecky encountered chemical compounds which were stable at room temperature but at temperatures only slightly greater decomposed to give off light.

No practical application for the discovery suggested itself; nevertheless, Dr. Kopecky remained intrigued. He realized that nature did have applications for the phenomenon. Bioluminescence, the production of “cold” light by bacteria, is important to fireflies and many forms of marine life. It is the means by which fireflies communicate—a female signals for a mate of her species or mimics a female of another species and devours the would-be suitors. In the marine realm, the applications are varied and ingenious. In a host of ways certain of the ocean dwellers rely on bioluminescence to commu-

nicate, attract prey, frighten enemies, and provide camouflage.

Dr. Kopecky's interest in the light-producing compounds has persisted, and in 1978 it led him to spend a sabbatical year at Scripps Institute of Oceanography in La Jolla, California, where considerable study of bioluminescence has taken place.

In nature, the compounds of “cold” light are manufactured by bacteria. Work done at the Scripps Institute has uncovered an interesting aspect to this: a built-in conservation factor. The researchers found that when they placed a culture of brightly glowing bacteria into a fresh medium the bacteria would multiply rapidly but the light intensity would not increase. Then suddenly the light intensity would increase greatly.

From repeated observations the La Jolla scientists found that the bacteria were, in essence, conserving energy by not producing light until it would be of sufficient intensity to be useful. They determined that the bacteria release a small molecule of unknown composition into the medium in which the bacteria exist; when sufficient small molecules are present, they signal the bacteria to synthesize the light-producing chemicals.

Being scientists, the La Jolla researchers were interested in identifying the unknown small molecule; being microbiologists, they did not have the necessary expertise to do so. That's where Dr. Kopecky, a chemist, comes in. He has undertaken the identification of the unknown molecule.

In his University of Alberta laboratory, Dr. Kopecky has begun growing the bacteria on a fairly large scale. Soon he hopes to use the separation techniques of organic chemistry to isolate from the media in which the bacteria are grown—an artificial sea water composed of distilled water, various salts and nutrients, and air—the small molecules. Then he should be able to identify their composition, thereby making a significant contribution to the understanding of bioluminescence. □

The 1979-80 Athletic Season

The 1979-80 athletic season brought two Canadian Inter-university Athletic Union championship pennants to The University of Alberta. In November, the Soccer Bears won three straight sudden-death playoff matches to capture the 1979 CIAU Soccer Championship, and



in March, the Hockey Bears won their third consecutive CIAU National Hockey Championship. Athletes from nine out of thirteen sports admirably represented the University in national championships in 1979-80.

Five University of Alberta teams clinched Canada West pennants in 1979-80, including Women's Cross Country, Soccer, Football (Western Intercollegiate Football League), Men's Track and Field, and Wrestling.

Three Golden Bear coaches were honored as national "Coach of the Year" this past season. Peter Esdale was named Soccer "Coach of the Year" in the CIAU, as was Golden Bear Volleyball Coach, Hugh Hoyles. (Hoyles shared the award with Larry Plenert of the University of Saskatchewan.) University of Alberta Wrestling Coach, John Barry, was named "Coach of the Year" by the Canadian Amateur Wrestling Association.

Pandas

Basketball

Debbie Shogan guided the Pandas (13-7) to a third place finish in Canada West this past season, behind Victoria (19-1) and

Calgary (14-6). The Pandas were consistently ranked among the top ten teams in the country throughout 1979-80, and were awarded a wild-card berth in the CIAU Championship tournament.

Unfortunately, the first game of the tournament was against the squad destined to be national champions, the University of Victoria Vikettes. On the bright side, fourth-year forward, Trix Kannekens was named to the 1979-80 second All-Canadian Team. Kannekens was also the lone Panda selected for the Canada West All Star squad (first team). Trix was the second leading scorer in Canada West in 1979-80 (18.5 average), behind CIAU "Player of the Year," Carol Turney-Loos of the Victoria Vikettes.

Ann Faulk and Nancy Spencer-Meyer will not return to the Pandas in 1980-81, while Trix Kannekens, Janet Bosscha and Glyns Griffiths are uncertain of their plans for next season.

Field Hockey

The Field Hockey Pandas finished in second place behind Victoria in Canada West this season, an improvement on their third place finish of 1978. Wendy Carson's squad thus qualified for the CIAU tournament in Victoria. The Pandas finished sixth in the tournament, as the championship was won by the University of Toronto. Two Pandas were named to the CIAU Tournament All-Star team, Jean Mustard and Mary Reid.

Top scorers for the 1979 Pandas were Dru Marshall and Nancy McCutcheon (5 goals each) and Jean Mustard (4 goals). Mustard, a member of Canada's National Team, was awarded the Bakewell Trophy as the Most Outstanding Female Athlete at The University of Alberta in 1979-80.

Gymnastics

After winning the CIAU National Championship in 1978-79, Sandy O'Brien's Panda

gymnasts struggled through most of the 1979-80 season. The Pandas came up with a valiant effort in the Canada West championships, but came second to the University of Calgary.

Two Pandas qualified for the CIAU national championships held at the University of Moncton, Carol Brinkhurst and Trish McMillan. Both were members of the 1978-79 Pandas team that captured the national title. McMillan and Brinkhurst finished tenth and seventeenth respectively, at the nationals. Trish McMillan, Pandas' top all around performer, was hampered by a December ankle injury throughout the latter part of the season.

Swimming and Diving

The University of Alberta Pandas finished third at the 1979-80 Canada West championships, behind conference winning Victoria, and the University of British Columbia. Highlighting the women's swimming competition was the conference record setting performance of Sandy Slavin in the 400m individual medley (5:26.6). The Panda diving contingent at the conference finals included Allison Godfrey and Molly Murtha. Allison earned a silver and bronze medal in the 1 meter and 3 meter competitions respectively, while Molly finished 9th and 7th in the same two events.

At the nationals in Quebec city, the Pandas, anchored by Sandy Slavin and Allison Godfrey, finished 16th among 24 teams. Allison Godfrey finished a respectable 5th and 7th in the 1 and 3 meter competitions respectively. Sandy Slavin earned a 6th place finish in the 400m individual medley.

Volleyball

The Volleyball Pandas finished the 1979-80 Canada West season in fourth place. The University of Saskatchewan Huskiettes went undefeated in conference play, finishing in first place in Canada West, and retaining their CIAU

national title. Two Pandas were named to the Canada West University Athletic Association All Star Team, Debbie Shade (first team), and Sheryl Stevenson (second team).

Golden Bears

Basketball

After guiding the St. Mary's University Huskies to two consecutive National Basketball Championships, Brian Heaney took over the coaching reins of The University of Alberta Golden Bears. The Golden Bears finished the season with a 9-11 record, good for fourth place in the six team conference. Canada West proved to be very competitive in 1979-80 with the final play-off spot not determined until the last weekend of play. Victoria (20-0), Calgary (12-8) and the University of British Columbia (11-9) finished ahead of the Bears, and the Victoria Vikings went on to win the national championship.

Fifth-year forward, Jim Bonin, was the lone Golden Bear named to the Canada West All Star team (second squad). Bonin finished fourth in conference scoring, with a 16.6 average over 20 games.

It was a year of rejuvenation for university basketball in Edmonton in terms of fan interest and support. Attendance increased and support. Attendance increased dramatically over the course of the year, from 800 in November, to 1800 for the latter home games of the regular season.

The future should bring young, capable new faces that will continue to turn the fortunes of Golden Bear Basketball at The University of Alberta. A summer of recruiting and rebuilding should bring the Golden Bears one step closer to national contention.

Cross Country —Bears and Pandas

On the cross country scene, The University of Alberta Pandas had a very successful season, capped by their first ever Canada West

Championship. Other team victories for the women in 1979 included the Sled Dog Open, Golden Bear Open and the Alberta Provincial cross country championship. The women's squad included Mary Burzminski, Bev Bush, Karen Chorney, Anne Galloway, Birgit Otto, Karen Smith, Janice Turner and Heather Rendell.

The Golden Bear runner finished second to the University of Saskatchewan in the 1979 Canada West Cross Country championships. The Bears were victorious in the annual Golden Bear Open last fall. Lyle Kuchmak had an outstanding season for Alberta, and was named the top male cross country athlete at the University of Alberta in 1979.

Football

"1979 is clearly a rebuilding year for The University of Alberta Golden Bears." That's how Head Coach Jim Donlevy viewed the new campaign as the team headed into training camp for the 1979 Western Intercollegiate Football League season. His outlook was understandably based on the fact that the 48 man roster included 24 new faces! Of the 24 new players, 16 were freshmen in college football competition, ten of whom were directly out of Edmonton high schools.

Despite their inexperience, the rookies filled some important gaps, and the team matured and molded together in miraculous fashion. The result: The University of Alberta Golden Bears won their first WIFL Championship since 1972.

The Golden Bears finished the 1979 season in first place with a 5-3 record, earning the right to host the WIFL Final against the University of British Columbia. With the game neck and neck throughout the first three quarters, Sean Kehoe responded to take the hero's role and play the best football game of his life. A brilliant 77 yard dash by Kehoe broke up a tight 18-17 game in the fourth quarter, and the Bears went on to win 28-17.

The victory sent the Bears to an Atlantic Bowl (national semi-final) matchup with the Acadia

Axemen in Halifax. Alberta, however, was brought down by a more experience Acadia squad (27-3) that went on to win the 1979 College Bowl.

Three Golden Bears were named to the 1979 WIFL All Star team: Gord Syme (defensive back) Trevor Kennerd (place kicker) and Dean Kmech (linebacker). Offensive lineman, Ben Der, was named "Rookie of the Year" in the WIFL.

Gymnastics

Francis Tally's Golden Bears finished a close second to the University of British Columbia in the 1979-80 Canada West Gymnastics Championships. James Hamilton was the Bears top performer at the conference championships. Hamilton had the third best all around score in the men's competition.

Over the course of the season, three Golden Bears qualified for the nationals. At the CIAU Championships in Halifax, James Hamilton, Charlie Mowat and Eric Ruckenthaler finished thirteenth, twenty-first, and twenty-seventh, respectively, among 36 competitors.

Hockey

After losing the 1979-80 Canada West championship to the University of Calgary, the Hockey Golden Bears were awarded a wild card berth in the national tournament, and proceeded to win their third consecutive University Cup!

The 1979-80 squad was not the same experienced club that had dominated the nation in the previous two years. The Golden Bears had lost several key members, including Coach Clare Drake and four players to the Canadian Olympic Team, and other players through graduation. With only 9 returning veterans, 13 rookies were added to the 1979-80 roster. In contrast, over the previous two seasons, 1978-79 and 1977-78, only two and three rookies respectively broke into the Golden Bear lineup, as Alberta won the national championship both years.

Head Coach, Bill Moores, and Assistant Coach, Peter Esdale,

guided the team to a 20-9 record and a first place finish in Canada West this season. However, the Golden Bears lost the best of three conference playoff series to the University of Calgary's Dinosaurs in two straight games. That set the scene for Alberta's wild card entry. Based on Alberta's No. 1 national ranking throughout most of the season, their two consecutive national titles, and 1979-80 conference



play, the Gold Bears were awarded a wild card berth in the six-team championship tournament. The Bears then proceeded to win three straight games, outscoring their opposition 13-6, to win the 1979-80 University Cup.

Three Golden Bears were named to the CIAU tournament All Star team, including Ted Poplawski (goal), Larry Riggan (defence) and Chris Helland (forward). Helland was selected as the "Most Valuable Player" in the championship tournament.

All three players were also Canada West All Stars (first team) in 1979-80, while Bruce Rolin (defence) was named to the second Canada West All Star squad. Goaltender Ted Poplawski was the lone Golden Bear named to the 1979-80 All Canadian Team.

Judo

The University of Alberta hosted the 1979-80 Canada West Judo Championships in February. The University of Lethbridge retained its conference crown, edging the University of British Columbia 32-30 in points. Ron Senda's Golden Bears finished a distant third among the three university clubs competing.

Matt Morrison was the top performer for The University of Alberta, finishing second in the 71 kilogram class. Two other Golden Bear competitors finished third in their respective weight classes, Phil Maloff (65 Kg) and Jim Unterschultz (78 Kg).

The University of British Columbia won four out of seven individual weight classes, while University of Lethbridge competitors took the other three titles.

Soccer

The University of Alberta Golden Bears, to the surprise of everyone but themselves, captured the Canadian Inter-University Athletic Union (CIAU) Soccer Championship in 1979. Golden Bear Coach, Peter Esdale, guided the club to an impressive 14-3-3 record overall, and was honored as Soccer "Coach of the Year" in the CIAU. Other individual honors went to forward, Lorenzo Antonello, and defender, Marc Olivieri, both named to the 1979 CIAU All Canadian team!

The Golden Bears clinched the 1979 Canada West Pennant with a 5-1-2 record. The CIAU Soccer playoffs were structured as sudden death matches between conference champions, with the most westerly team hosting the game.

The Golden Bears defeated the Lakehead University Nor'Westers of the Great Plains Athletic Conference in their first sudden death playoff match, 3-1. That set the scene for the University's hosting of the national semi-final against the Ontario champion Laurentian Voyageurs, the team that had been ranked first in the nation throughout the entire season. The CIAU semi-final was to be the thriller of the season, as the game went ninety minutes without a goal, and the Bears won 3-0 in overtime.

Peter Esdale's squad capped the season with a 2-0 win over St. Mary's giving the Bears the 1979 CIAU Soccer pennant. The Golden Bears won three consecutive sudden death playoff matches, and allowed only a single goal, outscoring their opposition 8 to 1!

The outlook for 1980 is very promising since 14 of 17 members

of the Championship Soccer squad were either freshmen or sophomores in 1979. Look for The University of Alberta Golden Bears to be heard from again next year!

Two Golden Bears, Claudio Perusco and Rob Kociancic, were invited to the preliminary training camp of the Edmonton Drillers this spring. The two Edmonton natives were both rookies with the Bears this season.

Swimming and Diving

John Hogg's Golden Bears finished a close second to the University of British Columbia in the 1979-80 Canada West Swimming and Diving Championships. The performance of Alberta swimmer, Brent Desbrisay, highlighted the conference finals. Desbrisay established 3 new Canada West Records! (400m Freestyle, 200m Freestyle, and 100m Freestyle). Golden Bear swimmer, Dave Long set another Canada West record in the 100m backstroke. On the diving side of the championships, Steve Stutt of Don McGavern's Golden Bears won a silver medal in both the 1 meter and 3 meter competitions.

Eight members of The University of Alberta Swimming and Diving Team qualified for the CIAU Championships. The Alberta squad consisted of six swimmers (Brent Desbrisay, Doug Cathro, Dave Long, Bruce Lecky, Dwight Manning, and Sandy Slavin, the lone Panda Swimmer), and two divers (Steve Stutt and Allison Godfrey).

The Golden Bears finished third as a team in the nationals, after being ranked 7th out of 24 schools heading into the championships. Brent Desbrisay was outstanding again, winning two golds (both were new CIAU records—200m and 400m freestyle) and one bronze medal (100m freestyle). The men's 800m freestyle relay team set a new CIAU record in capturing the gold medal.

Golden Bear diver, Steve Stutt, finished 5th and 4th respectively in the 1 and 3 meter events in Quebec city.

Track and Field—Bears and Pandas

The Golden Bears won their third straight Canada West Track and Field Championship in 1979-80. Anchoring the team was sprinter Frank Van Doorn, named the outstanding male athlete of the competition held at the Kinsmen Field House. (Van Doorn shared the award with Calgary's Peter Butler). One of the highlights of the men's competition was the 200m, where Frank Van Doorn established a new Canada West record (21.7).

Other men's highlights in 1979-80 were the new Canadian Indoor 4 x 100m record set by Sean Kehoe, Jack Sugget, Frank Van Doorn and Dan Biocchi (42.5 in the University of Alberta/University of Saskatchewan Dual Meet, Kinsmen Fieldhouse, 5 January), and the gold medal performance of Dan Biocchi in the 200m at the 1980 National Senior championships.

On the women's side, the Pandas finished second to a strong University of Saskatchewan team in the 1979-80 Canada West Championships. Margo Howe was selected as the most valuable female athlete in the conference championships, and was also named as the Pandas' most valuable member this season.

Volleyball

CIAU "Coach of the Year," Hugh Hoyles, guided the club to a second place finish in Canada West this season. The Bears lost the conference championship to the University of Saskatchewan, but gained a berth in the nationals since the Huskies were hosting the CIAU Championship tournament. At the nationals, the Golden Bears finished a very respectable third behind Manitoba (1979-80 CIAU Champions) and Saskatchewan. Terry Danyluk was named that Most Valuable Player of the CIAU tournament, and Ron Norton made the second tournament all-star team.

Terry Danyluk was the lone Golden Bear named to the Canada West All Star squad in 1979-80. With an average age of only 19 years, the Golden Bears

are sure to be heard from again next year!

Outside 1979-80 university competition, the Golden Bears captured the Alberta Provincial "AA" Volleyball Championship in April of 1980. By winning the title, the Bears earned the right to represent the province of Alberta in the Canadian Senior "AA" Championships held at Dalhousie University in Halifax, 25 to 27 April.

Wrestling

John Barry's Wrestling Golden Bears had one of their most successful seasons ever, winning eight of eleven tournaments, and capturing the 1979-80 Canada West crown. Six Golden Bears won Canada West titles, seven qualified for the nationals, and two Golden Bears won CIAU national championships in their respective weight classes. The Canada West "A" team unseated the tough Ontario squad in the nationals, winning the 1979-80 CIAU Championship by a single point!

Six Golden Bears won Canada West titles in their respective weight classes, including Scott Tate (118 lbs), Glen Purych (126 lbs), Tom McKee (134 lbs),

March Yurick (158 lbs), Pierre Pomerleau (167 lbs), and Earl Binder (190 lbs). All six, plus rookies Al Harman, (second in Canada West—110 lbs), qualified for the nationals. Two Golden Bears became Canadian Champions, Scott Tate and Pierre Pomerleau. For Pomerleau, (named Most Gentlemanly Wrestler at the CIAU championships) it was his second national crown (National champion in 1977-78).

As a team, the University of Alberta Golden Bears finished third at the CIAU's with 19 points, behind Lakehead (23) and Guelph (22).

Individual awards this season go to Al Harman (Outstanding Freshman), and Glenn Purych, awarded the Beaumont Cup as the Outstanding University of Alberta Wrestler. Pierre Pomerleau, who won his second CIAU championship in 1979-80, was awarded the Wilson Trophy as the Most Outstanding Male Athlete of the Year at The University of Alberta. Golden Bear Coach John Barry was named "Coach of the Year" in 1979-80 by the Canadian Amateur Wrestling Association. □

This article was contributed by Lou O'Hara, Sports Information Director.

Letters

■ The University of Alberta's archeological team is not the first group of Edmontonians to visit Ruoti, Italy. The Loyal Edmonton Regiment occupied this area briefly in 1943, and the regiment suffered its first casualty on the mainland of Italy, with the loss of Lt. Reg O'Donnell, the scout officer, who was killed by a burst of machine-gun fire at the S-bend in the road visible in the background of the picture on page 8 of the November *Folio/New Trail*.

In company with Col. Jim Stone, I re-visited Ruoti in 1968, but we were of course unaware of the archeological significance

of San Giovanni. We did however enjoy other treasures of this kind which had been in the path of our advance twenty-five years earlier: the splendors of Piazza Armerina in Sicily, and the more subdued but equally impressive remains of ancient Saepinum, lying amid barnyards and farmhouses near Campobasso.

The delightful photo of the festa in Ruoti brings back poignant memories of good times in southern Italy, a land not rich in material things but peopled by a race of great vivacity and charm.

A.M. Johnson, BA '42

alumni notes

24 An agronomist, who had a love affair with the Peace region, has had a scholarship established in his honor at Grande Prairie Regional College. The *E.C. Stacey, BA*, memorial scholarship, named after the late Beaverlodge researcher who spent 55 years of his life improving the quality of agriculture in the Peace region will be awarded for the first time this fall.

28 Author of eight books in chemistry and metallurgy, 135 technical papers, and numerous sections in handbooks, standard reference works, and scientific encyclopaedias, *Roland S. Young, BSc(Ag)*, is still active as a consultant in Victoria.

31 After completing the reorganization of Gillain Manor Services in B.C., a private non-profit foundation, *George Strachan, LLB*, has retired as chairman of the board of the foundation and as executive director of Gillain Manor.

38 *George T. Robertson, BA*, is professor of Spanish and French Emeritus at Eastern Washington University, Cheney, Washington.

40 *A. Allen Robertson, BSc*, Pulp and Paper Research Institute of Canada, has been honored with the 1980 Research and Development Division Award of the Technical Association of the Pulp and Paper Industry (TAPPI). Dr. Robertson is director of the Applied Chemistry Division of PPRIC, Montreal, and is a research associate, Department of Chemistry, McGill University.

The Branches



Vancouver: The Royal Vancouver Yacht Club was the picturesque locale for a large gathering of graduates this spring. Principal guests for the afternoon were Dr. Myer Horowitz (right) and Mrs. Barbara Horowitz, seen chatting with the Vancouver Branch president Bob Spencer, '48 BSc(Eng).



Grande Prairie: It was the red carpet treatment for Chancellor Jean Forest on her arrival in the "Peace" by air to address graduates in March. The branch registrar and major factotum of meeting arrangements, Dr. Frank Kozar, '56 BEd, is seen striding across the tarmac with welcoming arm outstretched.



Victoria: A feverish year of branch activities culminated in a reception and tea at Government House in March. By way of appreciation a Branch award in the name of His Honour Henry Bell-Irving, Lieutenant Governor of B.C., and Mrs. Bell-Irving, was placed with the Victoria Music Festival. Seen accepting the Award from Emil Lee, son of Emily (Chan) Lee, '64 GS, president of the Victoria unit, is Mrs. Bell-Irving.

42 John A. Dougan, BA, the first University of Alberta Rhodes Scholar after World War II and, until 1978, High Commissioner for Canada to Malaysia, is retired and is living in Victoria.

J.C.G. (Gordon) Brown, BA, the first Executive-Secretary of the Alumni Association, recently a retired member of the Canadian Diplomatic Service, is resident on Saltspring Island, B.C.

Gordon Myers, BSc(Pharm), is Acting Dean, Faculty of Pharmacy and Pharmaceutical Sciences.

43 Arthur C. Walsh, MD, was one of the three authors publishing *Mental Capacity: Medical and Legal Aspects of the Aging*, a book for trial lawyers to answer questions about cases involving mental incompetence.

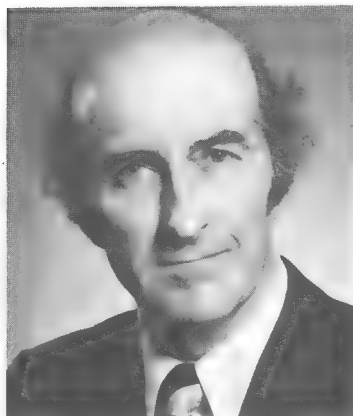
J. Allan Brownlee, BSc(Eng), is

General Manager, Manufacturing Division, Ocelot Industries Ltd.

48 A.S. Knowler, BSc, joined the University in 1954 and, since 1968, has served as chief accountant. His new position is, as successor to Murray Rousell, Comptroller of The University of Alberta.

49 The nine members of the National Energy Board represent a wide cross-section of professional experience. Its chairman is Jack G. Stabback, BSc(Eng).

50 Dance is a mover's art and Grant Strate, LLB, is nothing if not a mover, a prime mover where dance in this country is concerned. He was the winner of the 1979 Dance Ontario Award.



A.S. Knowler, BSc '48



D.C. Brinton, BSc(Ag) '51



J.N. Bowersock, BSc(Eng) '56



H.H. Unrau, BEd '57

51 Donald C. Brinton, BSc(Ag), has been appointed President, CanWest Broadcasting Ltd., Winnipeg, Manitoba.

53 Arthur L. Wood, BSc(Eng), is Vice-President, Heavy Oil, Norcen Energy Resources Limited.

54 The Energy Resources Conservation Board has announced responsibility changes for assistant managers in its Development Department. Field Operation responsibilities have been assumed by E.R. Brushett, BSc(Eng).

55 Ian Adam, BA, presented a paper at the George Eliot Centennial Conference this spring. Some twenty-six scholars of Victorian literature converged on the University of Puget Sound, Washington, for this major

international academic event that attracted registrants from across the United States, Canada, Great Britain and Japan.

56 Rollie Miles, BA, a former Edmonton Eskimo who has been physical education supervisor, Edmonton Separate School Board for more than twenty years, is serving as a member of the Alberta Human Rights Commission.

Orest Grekul, BSc(Eng), is chief engineer, Sceptre Resources Ltd.

James N. Bowersock, BSc(Eng), is senior vice-president, Pulp and Paper Products, St. Regis Paper Company, New York.

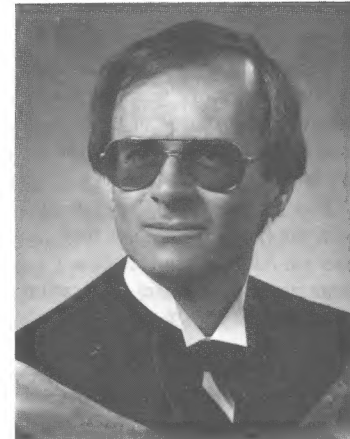
One of the founding members of Access Alberta and for three years chairman of the organization's management committee, Jack H. Snedden, DDS, is serving as chairman of the Access



D.A. Markle, BSc(Eng) '58



M.J. Ricketts, BSc(Eng) '67



R.J. Leonard, MBA '80

Board.

Oluf Gamborg, BSc(Ag), is Research Director, International Plant Research Institute Inc., San Carlos, California.

57 *H.C. (Hal) Dickout, BSc(Eng)*, is Vice President, Canadian General Electric.

Henry H. Unrau, BEd, has been awarded a graduate fellowship, Rotary Foundation of Rotary International. Currently assistant principal at Glenrose School Hospital, Edmonton, Mr. Unrau plans to study direction in Special Education at Burwood State College, Victoria, Australia.

Gordon R. (Buzz) McAthey, BSc(Eng), is Senior Vice President, Genstar Housing Components Ltd.

G.S. Christensen, BSc(Eng), Memorial University, Newfoundland, has co-authored a book entitled, *Optimal Economic Operation of Electric Power Systems*.

A Ukrainian Language Heritage School near Simcoe, Ontario, has as its originator *Evelyn Rosa, HEC*.

58 The 1979 Semiconductor Equipment and Materials Institute Awards for outstanding technical achievements in the area of semiconductor fabrication equipment went to a number of inventors and developers including *David A. Markle, BSc(Eng)*. Presentations were made by top industry executives and cited the Perkin-Elmer recipients for their work in the development of the

Micralign Projection Mask Aligner.

59 *Wayne G. Maunder, BSc(Eng)*, is marketing manager, Canadian Occidental Petroleum Ltd.

60 *Barrie Sanford Greiff, MD*, has recently published *Tradeoffs; Executive, Family and Organizational Life*, New American Library.

Donald R. Glover, BSc, is chairman and chief executive officer of the 18,500 member Life Underwriters Association of Canada.

61 *Harold I. Eist, MD*, is Medical Director, D.C. Institute of Mental Hygiene, Washington. Last year, in recognition of his contributions, the American Psychiatric Association awarded the Institute its Gold Award as the best clinic of its type in the country. For making a good idea work, for providing hope where there was none, Harold Eist has been named a Washingtonian of the Year.

62 *Sam Blakely, BA*, wears two hats and feels at ease in both. He divides most of his waking hours between his job as director of Calgary's social services department and his elected role as a public school board trustee. As well he is a Lieutenant-Colonel in the reserve army and Deputy-Commander of the Southern Alberta Militia District.

Gordon Everest, BCom, has recently returned from Australia after a single quarter leave from the University of Minnesota, College of Business Administration, where he is Associate Professor of Management Information Systems and Database Management Systems.

63 *Stan G. Souch, BEd*, has been named president, Northern Alberta Institute of Technology (NAIT), Edmonton. He was formerly Assistant Deputy-Minister, Field Services Division, Advanced Education and Manpower.

Juliet McMaster, GS, recently presented a paper at the George Eliot Centennial Conference, University of Puget Sound. She has also been elected Fellow of the Royal Society (Canada).

T.D. Strashok, BSc(Eng), is district superintendent, Edmonton district, Amoco Canada Petroleum Company Ltd.

64 *V.G. McKay, BCom*, is Executive Vice-President and Chief Operating Officer, Export Development Corporation.

Art Olson, BSc(Ag), has been appointed assistant Deputy-Minister, Research and Operations, Alberta Department of Agriculture.

The new Dean of Mathematics, effective 1 July, at the University of Waterloo is *J. Alan George, BSc*.

65 *Richard E. Moskalyk, GS*, Assistant Dean, Faculty of Pharmacy and Pharmaceutical Sciences, is President of the Association of Faculties of Pharmacy of Canada and elected to represent District No. 3 (City of Edmonton) on the Council of the Alberta Pharmaceutical Association.

P.J.A. Presidente, BSc, is Scientific Officer, working as a researcher in domestic and wildlife parasitology with the Victoria Department of Agriculture, Australia.

Oliver J. Chernyk, BEd, has been named to the governing council of Athabasca University, Edmonton.

66 *Julius Buski, BEd*, is deputy superintendent, Camrose city public schools.

Wayne Boddy, BSc(Eng), is production manager, Coseka Resources Limited, Calgary.

67 *M.J. (Mike) Ricketts, BSc(Eng)*, has been appointed a member of the Order of Military Merit in recognition of his pioneering work in the automation of aircraft maintenance for the Canadian Forces.

Syamalarao Evani, GS, has been promoted within the associate scientist classification, Specialty Products Research Laboratory of Central Research, Dow Chemical Company, Michigan.

68 *Donna Anne Ball, BSc*, is teaching Microbiology to

student technicians, Toronto Institute of Medical Technology.

Ethel (Edey) Fitzsimmons, MLS, is chief laboratory technologist in Saudi Arabia in one of three hospitals operated there by the Whittaker Corporation.

Roy E. Reid, BSc(Eng), along with his father, continues to operate Alberta Tank Ltd., a custom pressure vessel fabrication plant, Calgary.

69 Ulrich Rath, GS, is manager, corporate affairs, Hudson Bay Mining & Smelting Co., Ltd.

Gerald Slywka, GS, is associate professor, pharmaceutical chemistry, Ferris State College, Big Rapids, Michigan.

Gail Will, BA, is supervisor, Maternal and Child Health Unit, University Hospital, Edmonton.

Glen E. McDannold, BA, is branch manager, Data Systems Ltd., Victoria.

First prize in the new teleplay category of the 13th Annual Alberta Culture Playwriting Competition is **Linda Kupeczek, BA**, actress and vice-president of the Southern Alberta Branch of ACTRA.

70 S.E. Hrudehy, BSc(Eng), is Regional Editor for Canada of the new rapid communication journal "Environmental Technology Letters."

Neil McDonald, BEd, has been promoted to Professor, Department of Educational Administration and Foundations, University of Manitoba. His newest book, *Egerton Ryerson and His Times* has just been released by Macmillan.

Rodney H. Kneller, BCom, is manager, Calgary office, Touche Ross Ltd.

A \$250,000 Rockefeller Foundation scholarship has been placed with **Albert Befus, BSc**. The five-year award will enable Dr. Befus to research tropical parasites.

71 Rodney Clifton, GS, has joined the staff, University of Manitoba.

Maurice B. Dusseault, BSc(Eng), Profess of Civil Engineering, has

transferred his position to Mineral Engineering, University of Alberta.

Both the sense of humor of **Nellie McClung** and her compassion shine through a newly published biography entitled *Our Nell: A Scrapbook Biography of Nellie L. McClung* by **Candace Savage, B.A.**

72 W.O. Ingram, BSc(Eng), is division operations engineer, Amoco Canada Petroleum Company Ltd.

Robert P. Grant, BSc, recently received a Chartered Accountancy diploma from the University of British Columbia.

Denis Haughey, GS, is coordinator of community programs, University Extension, University of Victoria.

Robert B. Layton Jr., GS, has retired after 36 years as teacher and school librarian. The last eight were spent as Library Consultant, Lincoln County Board of Education, St. Catharines, Ontario.

Arden J. Berg, BSc(Eng), currently with Amoco Canada Petroleum Co. Ltd., (Calgary) is serving as Director of the Co-op Centre Credit Union there.

D.W. (Don) Krill, BSc, is Geology manager, Southern District, Ocelet Industries Ltd.

John E. Salmi, BSc, is manager of budgets, Planning and Control, Western District Office, Hudson's Bay Company.

73 The Education News Writers of Alberta Awards were offered by the Alberta Teachers' Association for the first time in 1979. The award for outstanding educational journalism by an Alberta Weekly Newspaper was won by the Western Catholic Reporter, edited by **John Rasmussen, BA**. The purpose of the awards is to promote the cause of education by honoring journalists and newspapers for the quality coverage of educational issues.

Ann Warriner, BLS, is chief librarian, Moose Jaw Public Library.

David W. Rowbotham, LLB, is

counsel for Marathon Petroleum Canada Ltd. and Pan Ocean Oil Ltd.

Cecile A. Fausak, BSc, is management Systems Analyst, Calgary General Hospital.

74 Ronald D. Friesen, BLS, has completed a term of office as President, Manitoba Library Association.

75 Keith S. Dobson, BA, has been appointed Assistant Professor, Department of Psychiatry, University of Western Ontario. His duties will include that of project director of an international collaborative research project on the psychotherapy of depression in the United States and Canada.

Bruno Maranda, GS, lately engaged in post-doctoral research, Department of Biophysics, University College, London,

England, is now senior research assistant, L'Institut de Pharmacologie de L'Université de Lausanne, Switzerland.

77 A part-time University of Calgary student and freelance writer, **Marion Skaar, BEd**, was one of eight handicapped artists chosen to contribute to a color calendar being distributed across Canada.

One of the first University of Victoria students in about a decade to win a Rhodes scholarship is **Ralph Osterwaldt, BA**. He will spend two years at Oxford University pursuing his interest in environmental issues, jurisprudence and international law.

Brian R. Herman, BCom, is Mortgage Manager, Paramount Life Insurance Co., Calgary.

Rich Smith, BSc(Ag), is the new farmstead engineering specialist, department of agriculture office,

On Campus Privileges for Alumni

Privilege Cards

Full on-campus swimming privileges for alumni and their families are extended at the University's Physical Education and Recreation Centre. Privilege cards for 1980-81 went on sale early in April at the Alumni Office 430 Athabasca Hall, Edmonton T6G 2E8 (phone 432-3224). Yearly rates: Alumni Family \$85, single alumnus \$57.50.

Towels and lockers (for adults only) are available from the equipment room for \$10. Indoor and outdoor jogging, and weight lifting room (adults only) are free with privilege cards. Hours of operation of the Physical Education and Recreation Centre are 7 a.m. to 10 p.m. Saturdays 8 a.m. to 10 p.m. Satutory holidays and Sundays—closed.

Library

Alumni enjoy certain library privileges. They may enter and use library materials. Borrowing privileges are permitted to members of the Alumni Associa-

tion who have demonstrable research needs. Arrangements for borrowing privileges should be discussed with the head librarian's secretary (432-3790), fifth floor, Cameron Library.

Recreational Swimming Schedule

Adult Swimming

Monday to Friday
11:30 a.m.-1:00 p.m. (W)*
Monday, Wednesday, Friday
4:00 p.m.-5:30 p.m. (W)
Tuesday, Thursday
4:00 p.m.-5:30 p.m. (W)
Monday, Thursday, Friday
7:00 p.m.-8:00 p.m. (W)
Tuesday, Wednesday
7:00 p.m.-8:00 p.m. (E)
Saturday
2:00 p.m.-5:00 p.m. (W)

Family Swimming . .

Tuesday, Thursday
4:00 p.m.-5:00 p.m. (W)
Monday, Wednesday, Friday
7:00 p.m.-8:00 p.m. (W)
Saturday
2:00 p.m.-4:00 p.m. (W)

*(W): West Pool; (E): East Pool □

Yorkton, Saskatchewan.

78 The thought of a lobster industry in the middle of the Prairies seems as incongruous as a fall cattle roundup in Nova Scotia. Yet the industry is flourishing in central Alberta. Doug Allen, BSc(Pharm), and a couple of other partners own and operate the Alberta Lobster Ranch near Red Deer's Northland Industrial Park.

79 Carol Zittlau, BSc(Nu), is Nurse Co-ordinator, Comprehensive Hemophilia Centre, University Hospital, Edmonton.

Donald Philippon, GS, is Senior Research Officer, Department of Continuing Education, Regina.

Like the first women doctors, lawyers, and jockeys, Jill Irwin, BPE, is trying to break through a barrier. She is an athletic trainer for men's teams.

80 R.J. (Bob) Leonard, MBA, has assumed his new duties as associate comptroller at The University of Alberta.

Elmer H. Logan, '37 LLB
Donald Earle Steele, '37 BSc(Eng)
Donald G. MacGregor, '41 DDS
John Ernest Oberholtzer, '41 MSc
Kathleen Stewart Graham, '43 MD
Colin Ross, '43 MD
Robert McClary, '46 BSc(Eng)
D. Alan Eagleson, '49 BSc
Donald A. Rix, '49 BSc(Ag)
Roy Eyres, '50 BEd
James McMaster Wishart, '54 BEd
Father Terence Tobin, '58 BSc

In Memoriam

Harry Alexander Kostash, '21 BA
Ruth E. (Lyness) Devlin, '26 MD
Charles H. McKenzie, '27 MD
Robert J. Scott, '29 BA

The Summer 1980 Guide to University Campus Lodgings

Old Alma can be a home away from home for graduates and their families visiting Edmonton over the summer.

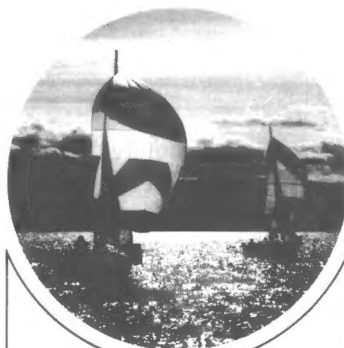
The on campus Lister Hall guest suite rates are:
\$16 (single per day);
\$22 (twin per day).
Residence room rates:
\$14 (single per day);
\$18 (twin per day).

Lister Hall is located 15 minutes from the city centre by bus, on the south side. Food facilities are available à la carte throughout the campus from 7 a.m. to 6:30 p.m. An informal bar, "The Ship," is open in the evenings. Parking is available at \$.50 per day. Cash only; credit cards are not accepted. Advance reservations are recommended. Phone 432-4281.

Campus lodgings for graduates and families are available at most Canadian universities. Identification is not absolutely necessary but recommended. Alumni membership cards are available from the Alumni Office, 430 Athabasca Hall, University of Alberta, Edmonton, Alberta. T6G 2E8.

Accommodate yourself this summer by requesting a copy of "Alumni Travelling—See Canada First" from Ms. Anne Pavlovich, Member at Large, Ont. Assn. of

Alumni Administrators, Centennial College of Applied Arts, P.O. Box 631, Station A, Scarborough, Ontario. M1K 5E9. Price: \$1.00.



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Write or call:
P.O. Box 1321 Station A
Kelowna, B.C. V1Y 7V8
Tel: (604) 766-3939



Alumni Homecoming 1980

FRIDAY, OCTOBER 3

8:00-10:00 p.m.

Wine & Cheese Party

Meet the Prof's
FACULTY CLUB

SATURDAY, OCTOBER 4

10:00 a.m.

Campus Tour—Rutherford Library (GALLERIA)

11:30 a.m.

Pre-Football Game Luncheon
LISTER HALL

2:00 p.m.

Football Game U. of A. Golden Bears vs
U.B.C. Thunderbirds

6:30-7:30 p.m.

Homecoming Reception
LISTER HALL

7:30 p.m. - 1:00 a.m.

Homecoming Banquet & Ball
LISTER HALL

SPECIAL CLASSES '20, '30, '40, '55, '60, '70, '75

TICKETS (ALUMNI OFFICE—432-3224)

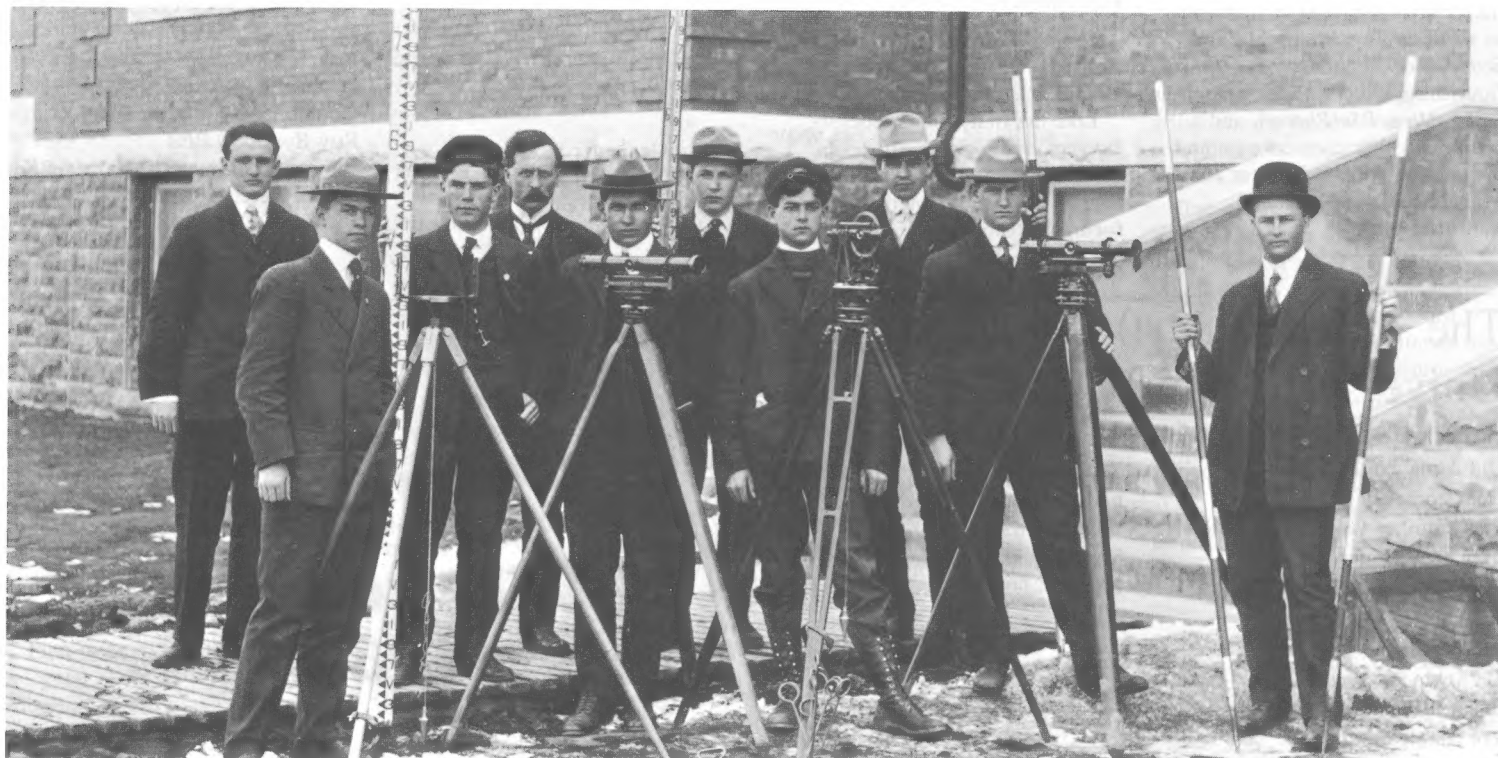
430 Athabasca Hall, U. of A.

Wine & Cheese Party	\$ 3.00/person
Banquet & Ball	\$12.50/person
Luncheon & Football Game	\$ 3.00/adults
	\$ 1.50/children
Combination (all events)	\$18.50/person

75th Anniversary

The University of Alberta will celebrate the 75th anniversary of its academic offerings in 1982-83. Alumni, staff, and students are invited to participate in the planning of the Jubilee celebrations by submitting ideas for special projects and events."

Please send your ideas to:
Dr. W.A. Presling, Chairman
75th Anniversary Policy Group
420 Athabasca Hall
The University of Alberta.
T6G 2E8

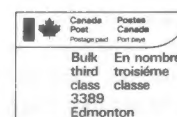


The University's Civil
Engineers in 1910 (UAArchives)

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